

Low carbon transport - How can governments help?

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VIRTUAL | VIRTUEL

XVI WORLD WINTER SERVICE AND ROAD RESILIENCE CONGRESS
XVI^e CONGRÈS MONDIAL DE LA VIABILITÉ HIVERNALE ET DE LA RÉSILIENCE ROUTIÈRE
XVI CONGRESO MUNDIAL DE VIALIDAD INVERNAL Y RESILIENCIA DE LA CARRETERA



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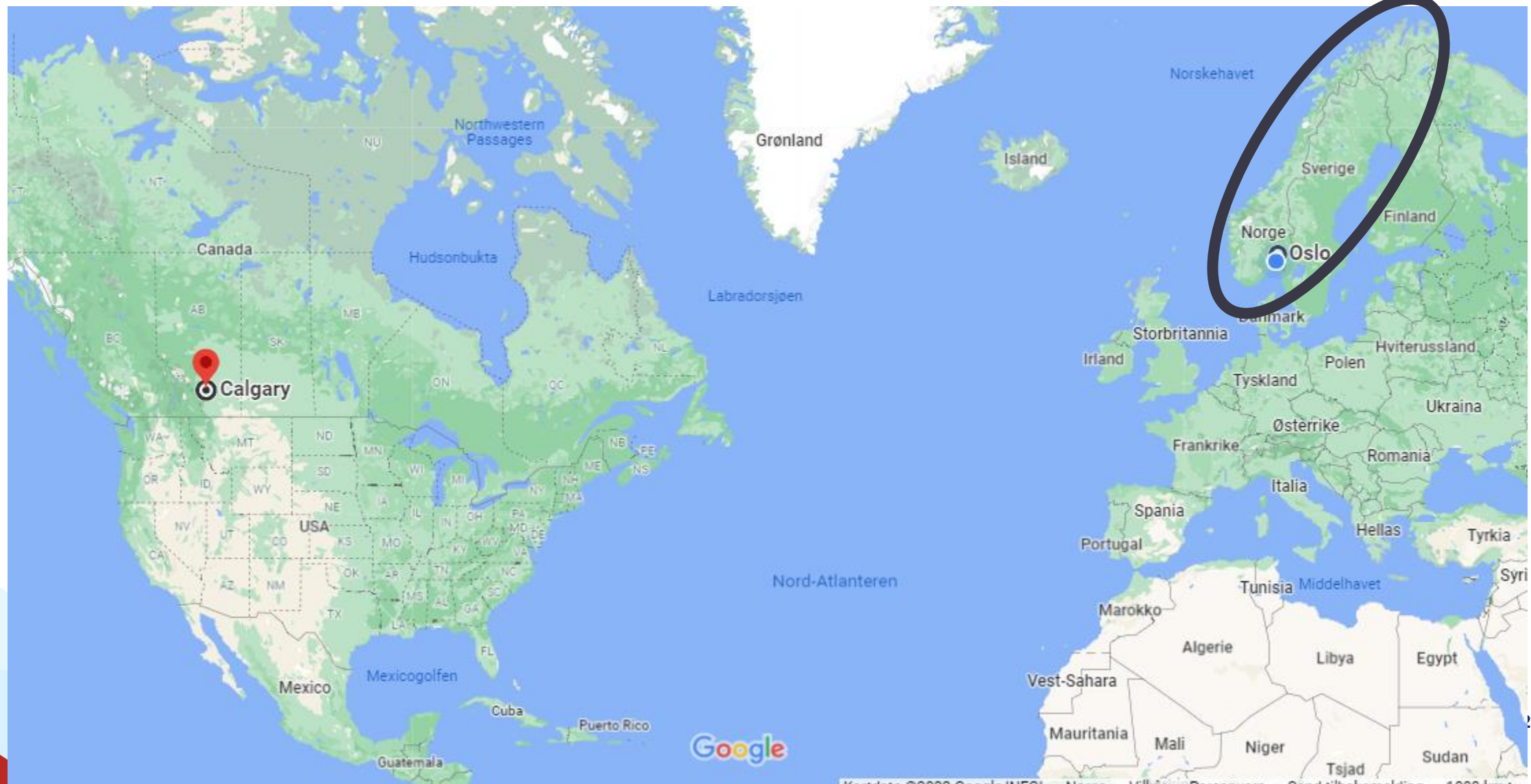


Norway – in the north of Europe

- 5,2 mill. inhabitants, the capital is Oslo



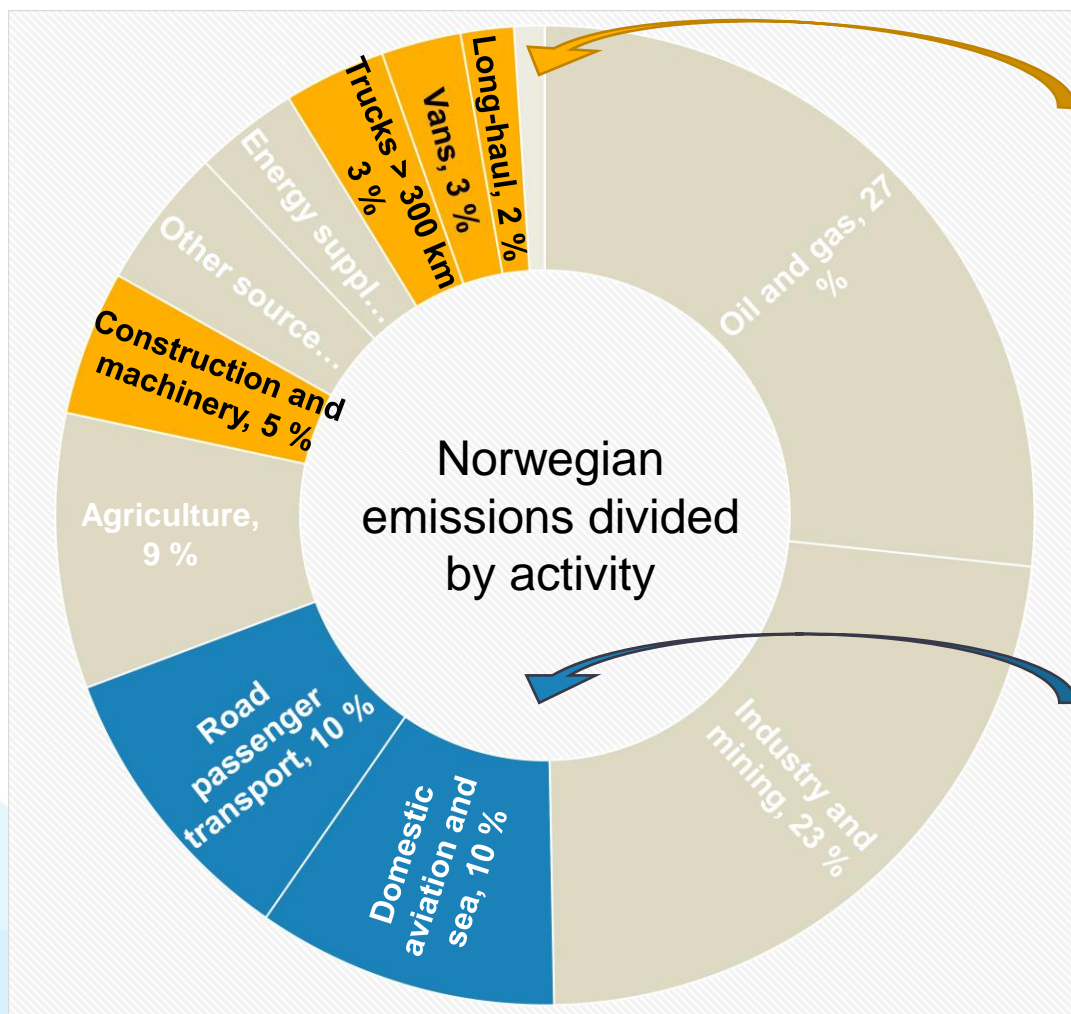
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Target: 50-55% reduction by 2030

- and close to zero emissions by 2050

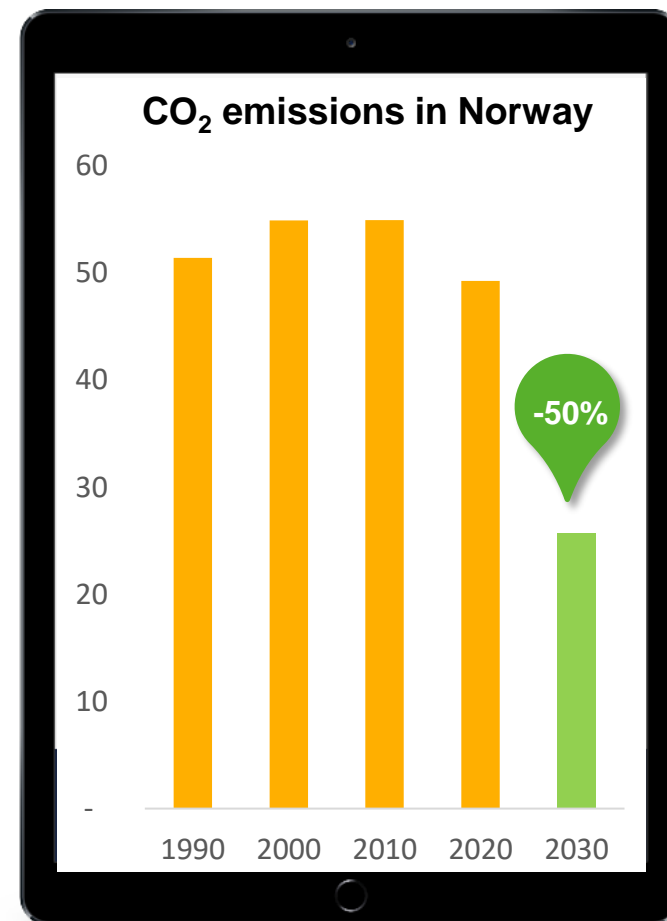


Yellow shares:

- 6 % from local and regional trips
- 5 % from construction and heavy machinery
- 2 % from long-haul (>300 km)

Blue shares:

- 10 % from road passenger transport
- 10 % from domestic aviation and sea transport



Climate cure 2030

- the Norwegian government's knowledge base

Made by 6 administrations and others responsible for environment, energy, transport and agriculture

Investigation of the non-quota sector

Finding measures that cut emissions by >50%

1200 pages of action, barriers, measures and cost-benefit analysis

incl. 31 transport and construction measures

Thorough investigation, no recommendations



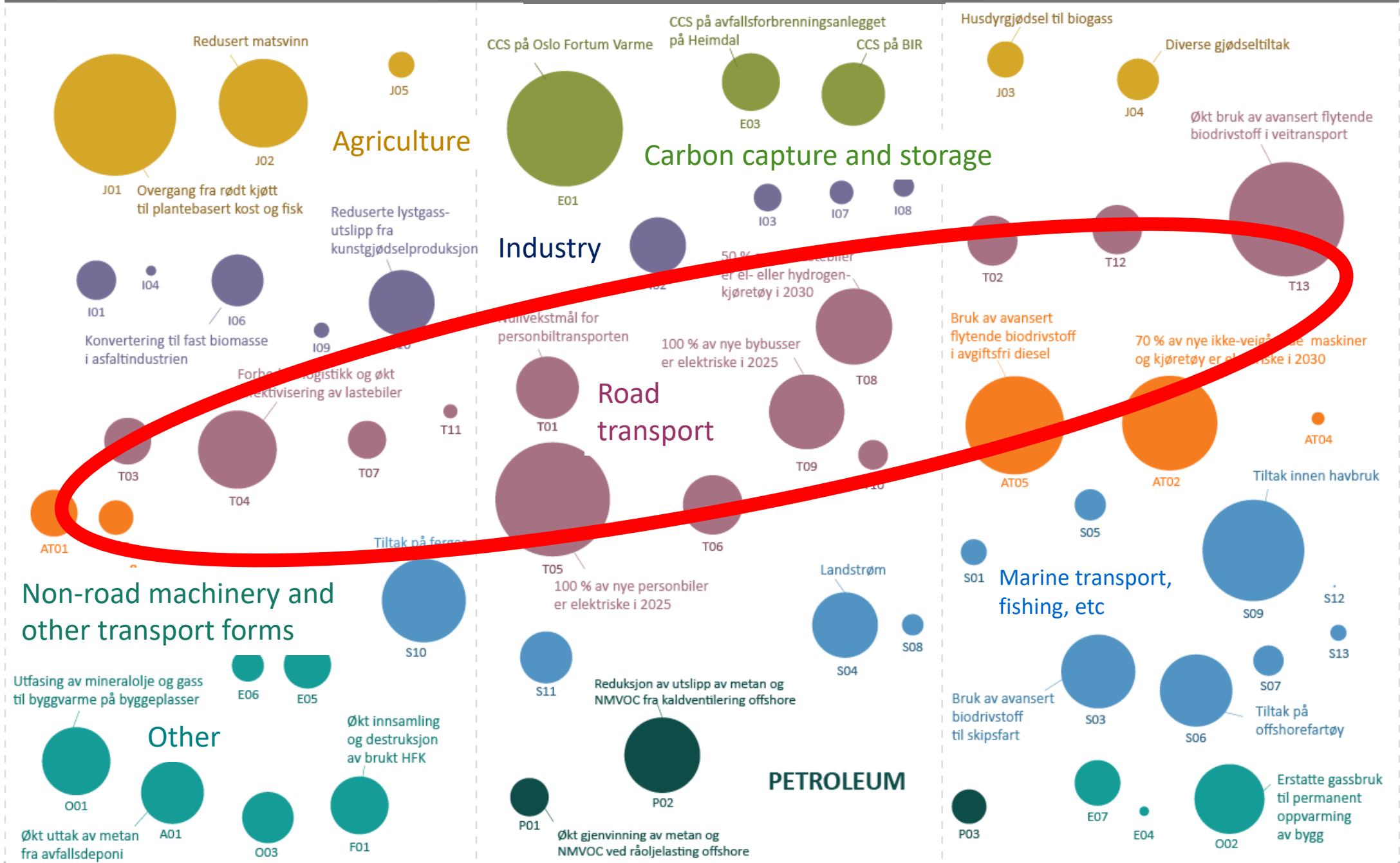
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Cost less than 500 NOK/tonne

Cost 500 – 1500 NOK/tonne

Cost more than 1500 NOK/tonne

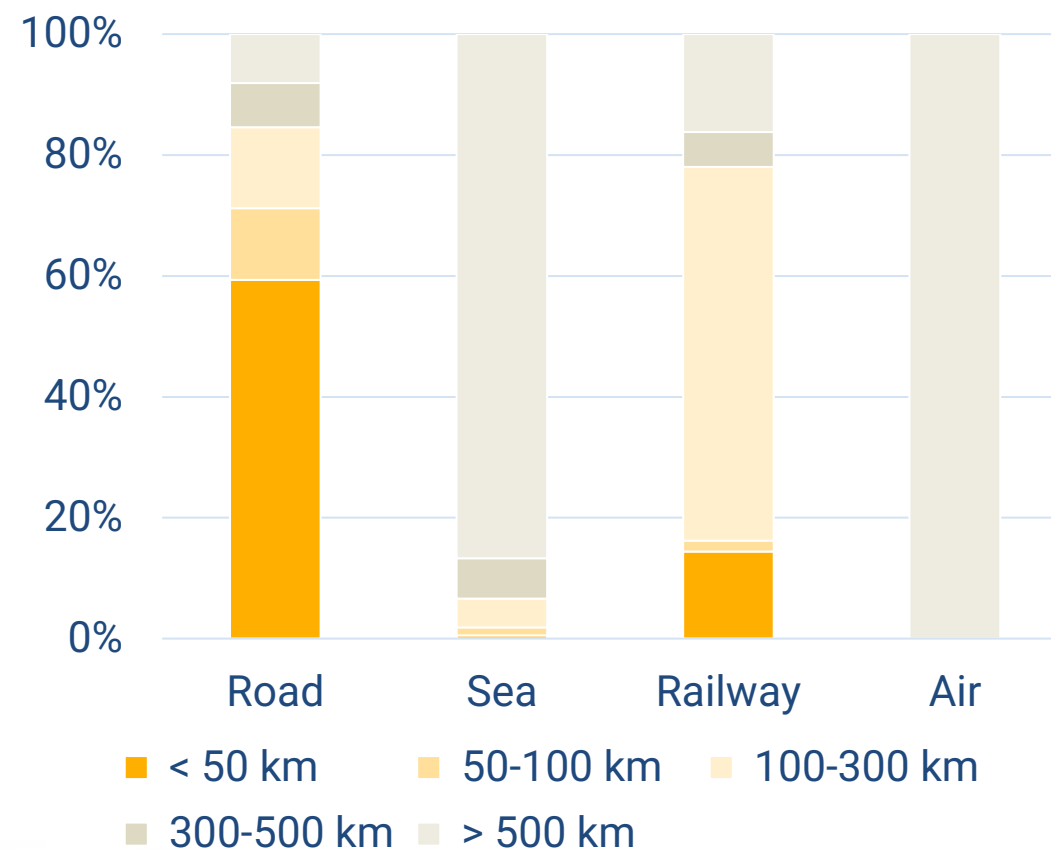
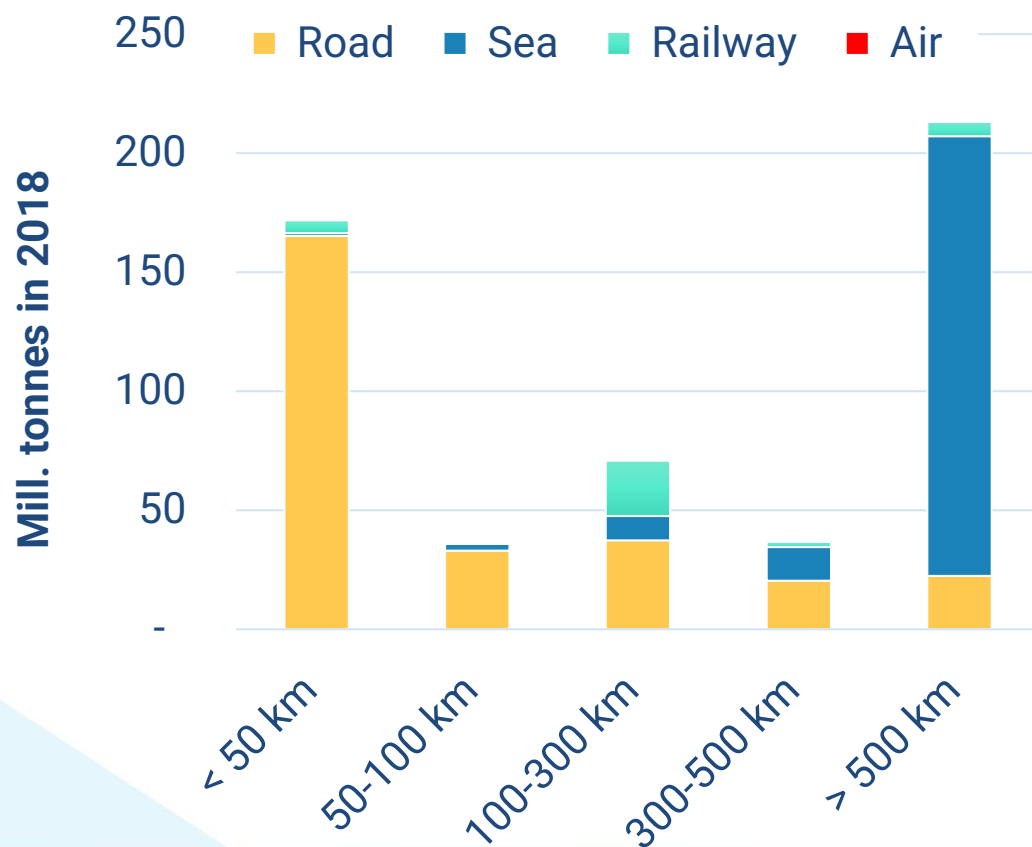




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Most trips are short

- and short trips are road-based

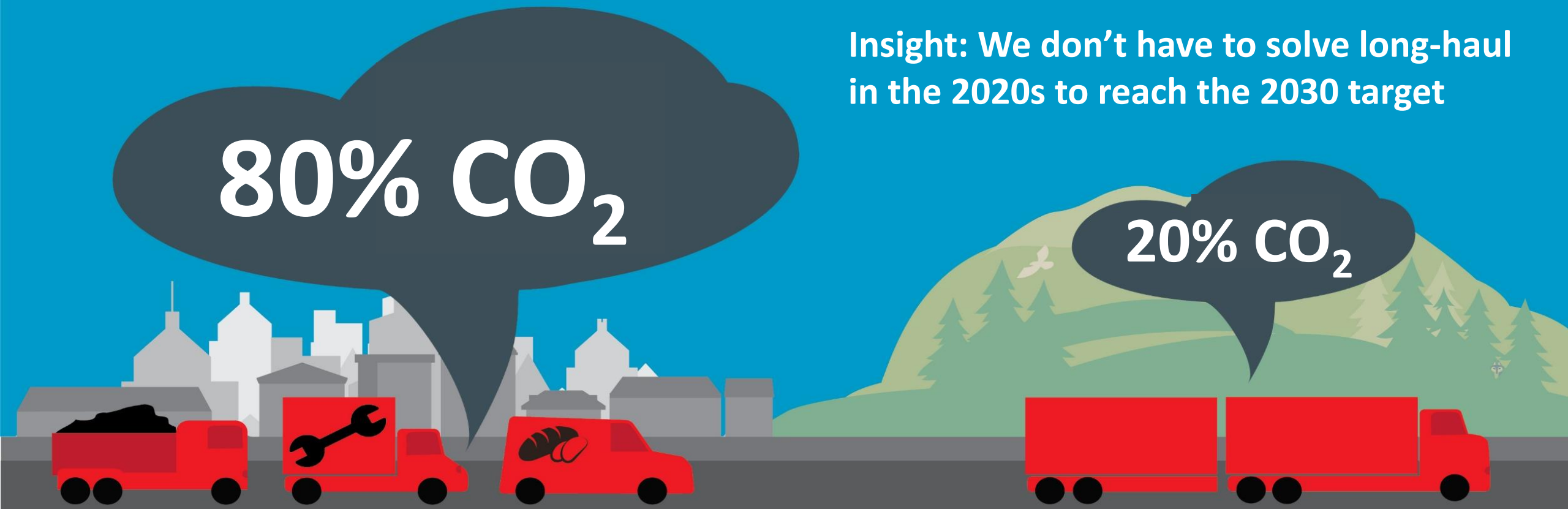


Cheap measures:	Beneficial measures before the year 2030:	Expensive measures:	Expensive measures:
Less driving - improved logistics and increased load per vehicle	Electrification	Climate-friendly biofuels	Transfer from road to sea and rail
- 1.5 mill. tonnes CO ₂	- 2 mill. tonnes CO ₂	- 1.5 mill. tonnes CO ₂	- 0.5 mill. tonnes CO ₂

Insight: We don't have to solve long-haul in the 2020s to reach the 2030 target

80% CO₂

20% CO₂



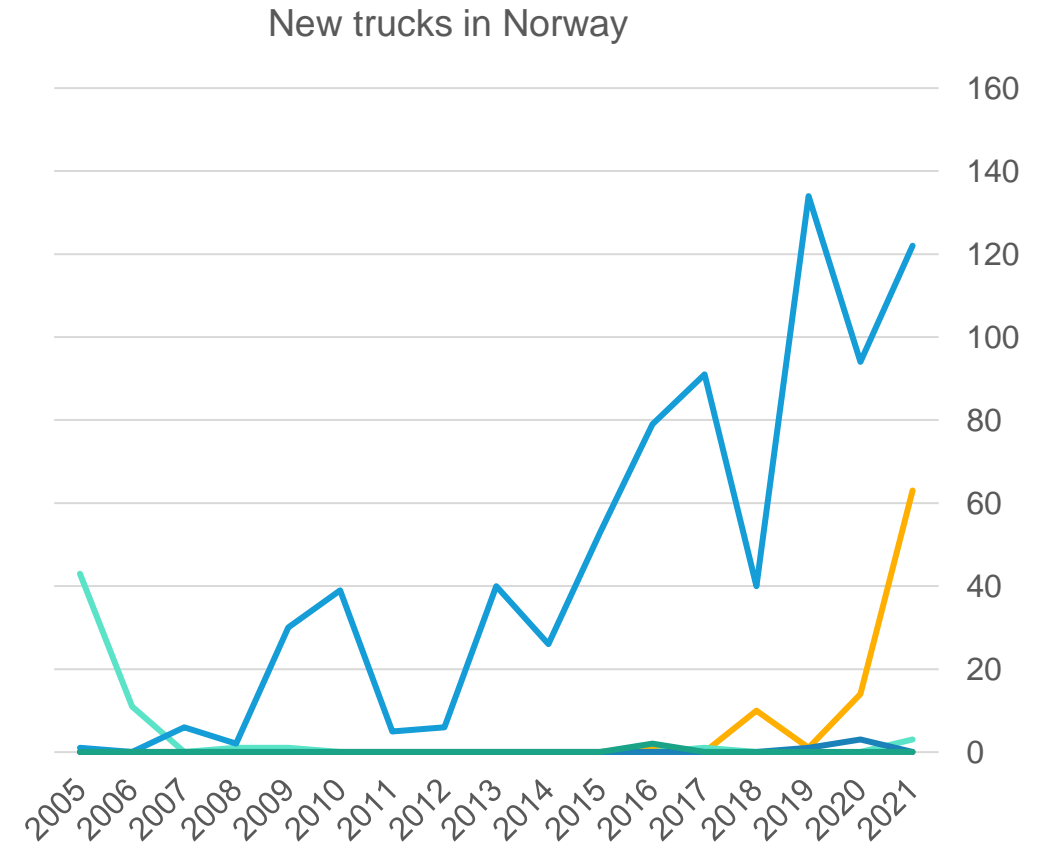


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Electric trucks in production

- public contracts demand reduced emissions

- Previously only biogas as an alternative to diesel (blue line)
- Testing of battery electric is well received by the industry (yellow line)
- Charging infrastructure must keep up
- Public procurement is a driving force





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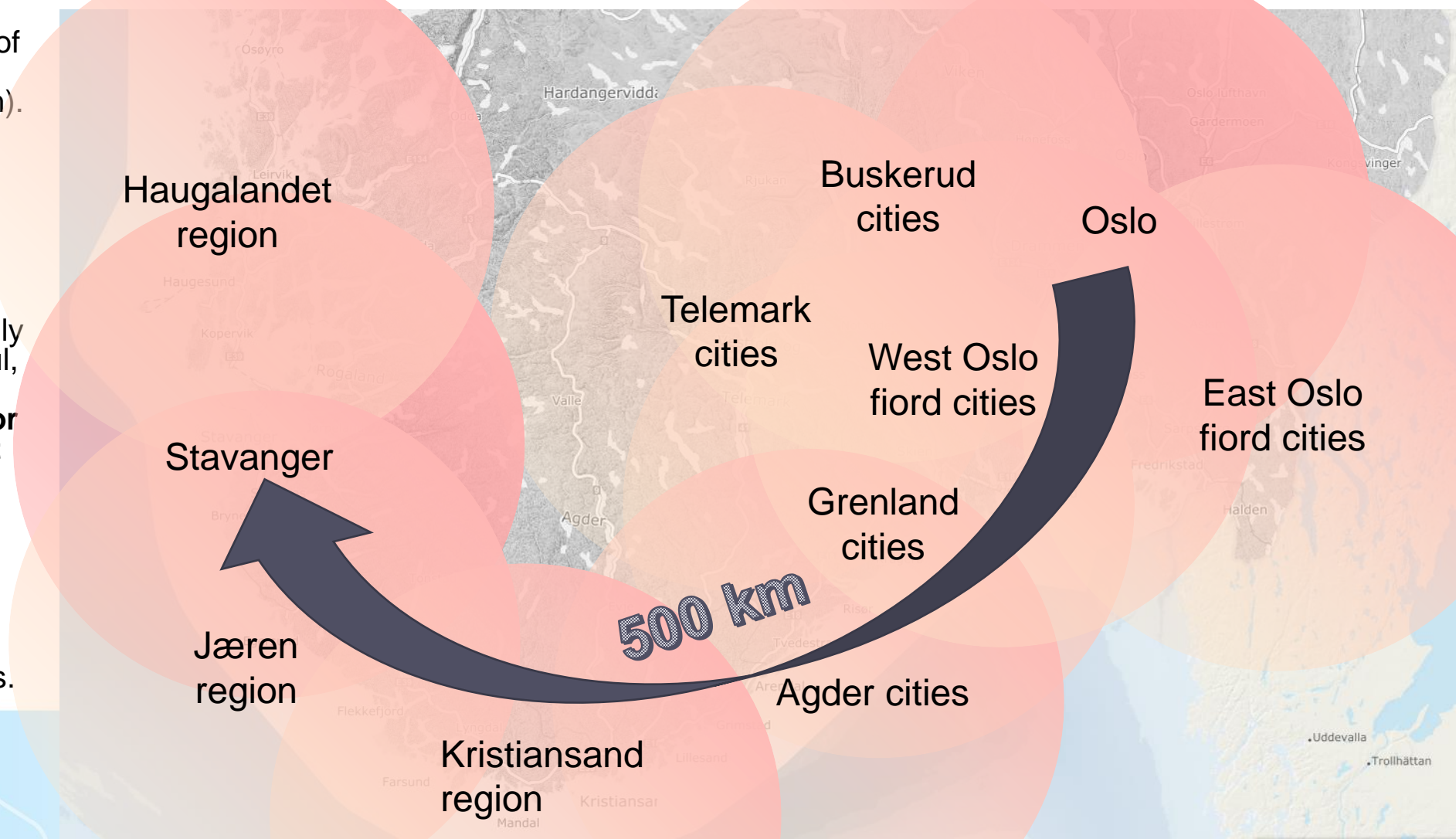
Transition for shorter trips first

- may have an impact on zero-emission (ZE) long-haul

Of all freight transport, 2/3 of the km are driven as local and regional trips (<300 km). We already have electric trucks that can carry out these trips. Thus, **we will establish stationary charging for these short trips.**

When we are technologically ready to solve the long-haul, the last 1/3 of km driven, **charging infrastructure for 2/3 of all freight transport will already exist.**

So, we will not choose a solution for ZE long-haul from scratch, but from a situation where an overlapping charging infrastructure already exists.



Emission cuts from road constructions

- and reuse infrastructure for freight transport

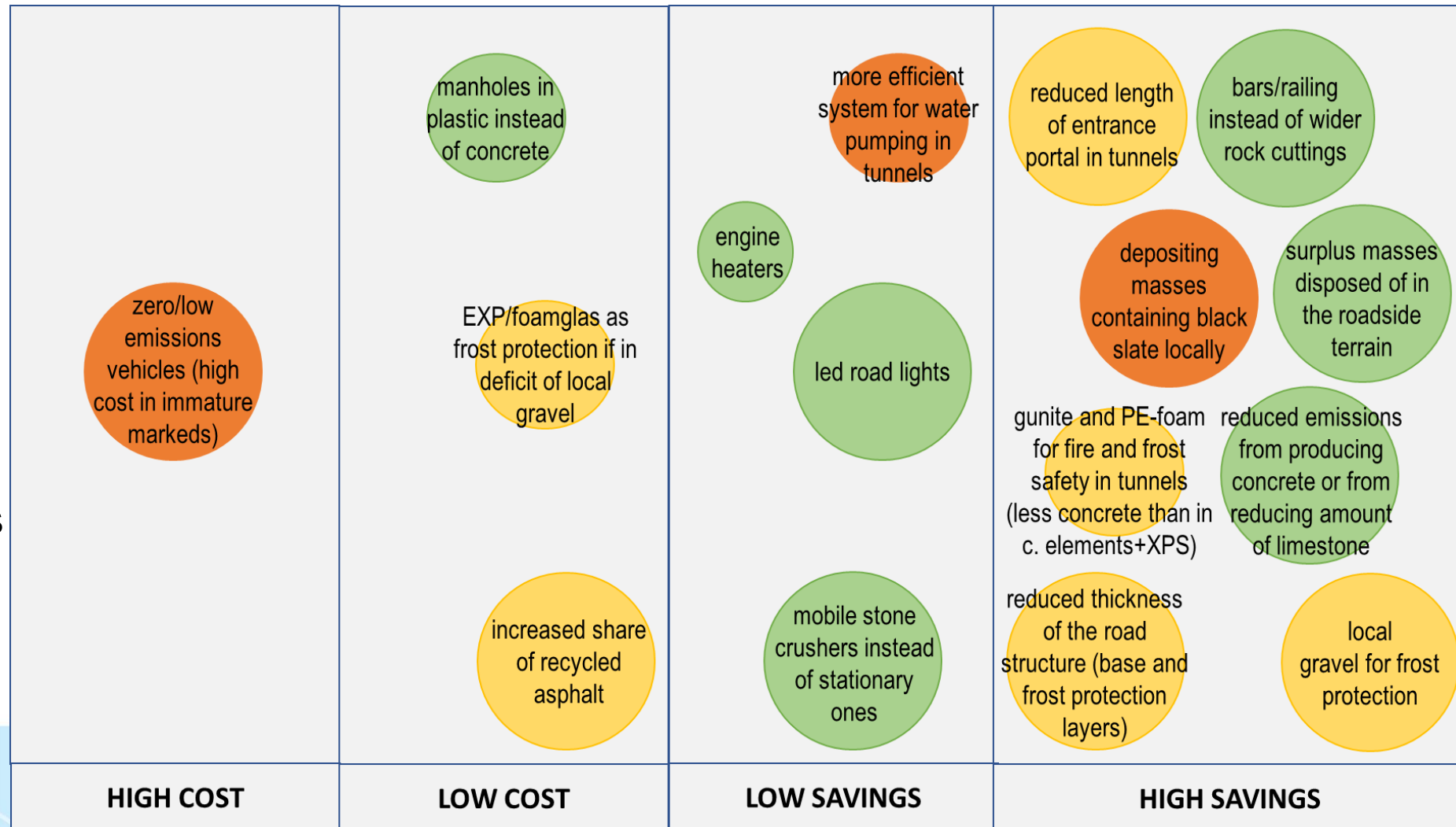
Less transport

- Less blasting
- More reuse of local rock and soil materials

Less use of lime stone, or produce climate-friendly concrete

Electricity and climate-neutral fuels

Demands in public procurements



The commercial sector and the actors

- commitment, cooperation and predictability are crucial

45-60% reduction by 2030 and 100% by 2050

ROADMAP FOR THE COMMERCIAL SECTOR'S TRANSPORTS



- maintaining high mobility
while moving towards zero
emissions by 2050



SEAMAP FOR GREEN COASTAL SHIPPING



- 60% reduction by 2030
and 100% by 2050

Representing:

- **Transport of goods**
- Airlines
- Buses
- Construction
- Fishing
- Ferries
- Forestry
- Fuel suppliers
- Harbours
- Shortsea shipping

The environmental organization
Zero has participated



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The National Transport Plan (NTP)

- incl. the Government's strategy for freight transport



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- VEHICLES and DRIVING: High taxes
- ZERO EMISSION: Less taxes and economic support
- (CHEAPER) ELECTRICITY from hydro power
- PRIORITY for zero-emission vehicles - bus lines/parking
- CAR-FREE AND EMISSION FREE city centres
- CHARGING infrastructure - available and affordable
- REST AREAS with charging infrastructure
- PUBLIC DEVELOPMENT CONTRACTS AND PURCHASE
- R&D, PILOTING; zero-emission ferries, electric vans and trucks, biofuels, long haul using stationary charging?, hydrogen?, electric roads?, synthetic fuels?



Norwegian Ministry
of Transport

English Summary

Meld. St. 20 (2020–2021) Report to the Storting (white paper)

National Transport Plan
2022–2033



Thank you for your attention

